

IRON SHIPS.

No. 2296 Survey held at Glasgow Date, First Survey 21st March 70 Last Survey 18th March 71
On the SS City of Poona Master R McNeil

Tonnage under Tonnage Deck 1619 31
Ditto of Upper Decks 646 19
Ditto of Houses on Deck 17 51
Gross Tonnage 2283 01
Net Tonnage 96 13
Tonnage for fees 2265 30
Cabin Room 730 56
Master Tonnage, as a steamer, cut on beam 1456 32

ONE OR TWO DECKED, SPAR, OR AWNING-DECKED VESSELS.
Half moulded breadth 17 9 5/8
Depth from upper part of keel to top of upper deck beams 22 6 6
Girth of Half Midship Frame (as per Rule) 35 5
1st Number 46 11
Length 323
2nd Number 24503
Depths to Length Under 1200 1640

THREE DECKED VESSELS.
Half Moulded Breadth 17 9 5/8
Total Depth if three or more Decks 29 6 6
Total Girth of Half Midship Frame 42 3
3rd Number 90 11
Length 323
4th Number 29105
Breadths to Length Under 9

Built at Glasgow
When built 1870 Launched 24th Nov^r
By whom built Chas Cunliffe & Co
Owners C Smith and Sons
Port belonging to Glasgow
Destined Voyage Calcutta
If Surveyed while Building, Afloat, or in Dry Dock.

Length on deck as per Rule 323 Feet. Inches. Moulded Breadth 35 11 Feet. Inches. Depths from top of Floors to Upper and Main Deck Beams, as per Rule 21 6 Feet. Inches. Power of Engines, 3 Horse. N^o. of Decks 3 N^o. of Tiers of Beams 3

| Dimensions of Ship per Register, length, breadth, depth | Inches in Ship | Inches required per Rule | Inches in Ship | Inches required per Rule | Inches in Ship | Inches required per Rule | Inches in Ship | Inches required per Rule |
|--|---------------------|--------------------------|---------------------|--------------------------|---------------------|--------------------------|---------------------|--------------------------|
| Keel, if bar iron, depth and thickness | 11 x 2 3/4 | 11 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 |
| Stem, if bar iron, moulding and thickness | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 |
| Stern-post for Rudder do. | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 | 10 x 2 3/4 |
| Stern-post for Propeller | 10 1/2 x 3 1/2 | 10 x 3 1/2 | 10 1/2 x 3 1/2 | 10 x 3 1/2 | 10 1/2 x 3 1/2 | 10 x 3 1/2 | 10 1/2 x 3 1/2 | 10 x 3 1/2 |
| Distance of Frames from moulding edge to moulding edge, all fore and aft | 24 24 | (Class 100A) |
| Frames, size of Angle Iron, for 2/3 length amidships | 5 3 9 | 5 3 9 | 5 3 9 | 5 3 9 | 5 3 9 | 5 3 9 | 5 3 9 | 5 3 9 |
| Do. for 1/3 at each end | 5 3 9 | 5 3 9 | 5 3 9 | 5 3 9 | 5 3 9 | 5 3 9 | 5 3 9 | 5 3 9 |
| Reversed Frames, size of Angle Iron | 3 1/2 3 8 | 3 1/2 3 8 | 3 1/2 3 8 | 3 1/2 3 8 | 3 1/2 3 8 | 3 1/2 3 8 | 3 1/2 3 8 | 3 1/2 3 8 |
| Plating, depth and thickness of Floor Plate at mid line for half the length amidships | 26 10 26 | 26 10 26 | 26 10 26 | 26 10 26 | 26 10 26 | 26 10 26 | 26 10 26 | 26 10 26 |
| Do. at the ends | 39 8 | 39 8 | 39 8 | 39 8 | 39 8 | 39 8 | 39 8 | 39 8 |
| Do. do. do. at Bilge Keelson | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| Do. height extended at the Bilges | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| Beams, Upper, Spar, or Awning Deck (No.) | 7 7 7 | 7 7 7 | 7 7 7 | 7 7 7 | 7 7 7 | 7 7 7 | 7 7 7 | 7 7 7 |
| Single or double Angle Iron, Plate or Tee Bulb Iron | 3 2 1/2 5 3 2 1/2 5 | 3 2 1/2 5 3 2 1/2 5 | 3 2 1/2 5 3 2 1/2 5 | 3 2 1/2 5 3 2 1/2 5 | 3 2 1/2 5 3 2 1/2 5 | 3 2 1/2 5 3 2 1/2 5 | 3 2 1/2 5 3 2 1/2 5 | 3 2 1/2 5 3 2 1/2 5 |
| Single or double Angle Iron on Upper edge | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 |
| Average space | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 |
| Beams, Main or Middle Deck (No.) | 8 1/2 9 8 1/2 9 | 8 1/2 9 8 1/2 9 | 8 1/2 9 8 1/2 9 | 8 1/2 9 8 1/2 9 | 8 1/2 9 8 1/2 9 | 8 1/2 9 8 1/2 9 | 8 1/2 9 8 1/2 9 | 8 1/2 9 8 1/2 9 |
| Single or double Angle Iron, Plate or Tee Bulb Iron | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 |
| Single or double Angle Iron on Upper Edge | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 |
| Average space | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 |
| Beams, Lower Deck, Hold or Orlop (No.) | 9 9 9 | 9 9 9 | 9 9 9 | 9 9 9 | 9 9 9 | 9 9 9 | 9 9 9 | 9 9 9 |
| Single or double Angle Iron, Plate or Tee Bulb Iron | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 | 3 1/2 3 7 3 1/2 3 7 |
| Single or double Angle Iron on Upper Edge | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 |
| Average space | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 | 4 1/2 |
| Keelson Centre line, single or double plate, box, or intercostal, size of Plates | 10 14 11 10 14 11 | 10 14 11 10 14 11 | 10 14 11 10 14 11 | 10 14 11 10 14 11 | 10 14 11 10 14 11 | 10 14 11 10 14 11 | 10 14 11 10 14 11 | 10 14 11 10 14 11 |
| Bilge Plate to Intercostal Keelson | 9 10 9 9 10 9 | 9 10 9 9 10 9 | 9 10 9 9 10 9 | 9 10 9 9 10 9 | 9 10 9 9 10 9 | 9 10 9 9 10 9 | 9 10 9 9 10 9 | 9 10 9 9 10 9 |
| Size of Angle Irons | 6 1/2 4 9 6 1/2 4 9 | 6 1/2 4 9 6 1/2 4 9 | 6 1/2 4 9 6 1/2 4 9 | 6 1/2 4 9 6 1/2 4 9 | 6 1/2 4 9 6 1/2 4 9 | 6 1/2 4 9 6 1/2 4 9 | 6 1/2 4 9 6 1/2 4 9 | 6 1/2 4 9 6 1/2 4 9 |
| Side Intercostal Keelson, size of Plates | 24 10 9 24 10 9 | 24 10 9 24 10 9 | 24 10 9 24 10 9 | 24 10 9 24 10 9 | 24 10 9 24 10 9 | 24 10 9 24 10 9 | 24 10 9 24 10 9 | 24 10 9 24 10 9 |
| Angle Irons on tops of Floors | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 |
| Bilge Keelson, Bulb Iron | 9 9 9 | 9 9 9 | 9 9 9 | 9 9 9 | 9 9 9 | 9 9 9 | 9 9 9 | 9 9 9 |
| do. Intercostal plates riveted | 11 9 11 9 | 11 9 11 9 | 11 9 11 9 | 11 9 11 9 | 11 9 11 9 11 9 | 11 9 11 9 11 9 | 11 9 11 9 11 9 | 11 9 11 9 11 9 |
| do. at fore end of ship - to plating for 26 1/2 length | 11 9 11 9 | 11 9 11 9 | 11 9 11 9 11 9 | 11 9 11 9 11 9 | 11 9 11 9 11 9 | 11 9 11 9 11 9 | 11 9 11 9 11 9 | 11 9 11 9 11 9 |
| do. do. Angle Irons | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 |
| Side Stringers (No.) size of Angle Irons | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 | 6 4 9 6 4 9 |
| do. Intercostal plates riveted to plating for three-fifths length, from frame to frame | 11 10 11 10 | 11 10 11 10 | 11 10 11 10 11 10 | 11 10 11 10 11 10 | 11 10 11 10 11 10 | 11 10 11 10 11 10 | 11 10 11 10 11 10 | 11 10 11 10 11 10 |
| Transoms, material <u>Iron</u> or, if none, in what manner compensated for. | | | | | | | | |
| Knight-heads <u>Iron</u> Hawse Timbers <u>Teak Chocks</u> | | | | | | | | |
| Windlass <u>Iron Patent</u> Pall Bitt <u>Iron</u> | | | | | | | | |
| The Frames extend in one length from <u>Keel</u> to <u>Deck Stringer</u> Riveted through plates with (7/8 in.) Rivets, about 6 1/2 apart. | | | | | | | | |
| The Reverse Angle Irons on the floors and frames extend <u>from</u> the middle line <u>to</u> <u>aboard</u> <u>deck</u> and <u>to</u> <u>up</u> <u>deck</u> alternately | | | | | | | | |
| Keelsons. Are the various lengths of Plates and Angle Irons properly connected? <u>Yes</u> And are their butts properly shifted? <u>Yes</u> | | | | | | | | |
| Plates, Garboard, double or <u>single</u> Riveted to Keel, double or <u>single</u> at upper edge, with Rivets (7/8 in.) diameter, averaging (6 3/4 ins.) from centre to centre. | | | | | | | | |
| Do. Edges from Garboards to upper part of Bilge, worked Clencher, double or <u>single</u> Riveted; with Rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre. | | | | | | | | |
| Do. Butts from Keel to turn of Bilge, worked carvel with butt straps to strakes (1 1/2 in.) thick, double or <u>single</u> Riveted; with Rivets (7/8 in.) diameter averaging (3 1/2 ins.) from centre to centre. Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? <u>No</u> | | | | | | | | |
| Do. of <u>3</u> Strakes at Bilge for <u>half</u> length, treble riveted with Butt Straps <u>7/8</u> thicker than their plates. | | | | | | | | |
| Do. Edges from bilge to Main Sheerstrake, worked <u>carvel</u> with a lining piece (<u>1 1/2</u> thick, or clencher, double or <u>single</u> riveted; with rivets (7/8 in.) diameter, averaging (3 1/2 ins.) from centre to centre. | | | | | | | | |
| Do. Edges of Sheerstrake, Main, double or <u>single</u> Riveted. Upper, double or <u>single</u> Riveted. At upper edge <u>single</u> At lower edge <u>double</u> | | | | | | | | |
| Do. Butts from Bilge to Main Sheerstrake, worked Carvel with Butt Straps (1 1/2 in.) thick, double or <u>single</u> Riveted; with Rivets (7/8 in.) diameter, averaging (3 1/2 ins) from centre to centre. | | | | | | | | |
| Do. Butts of Main Sheerstrake, double or <u>single</u> Riveted. Butts of Upper or Spar Sheerstrake, and Upper Deck Stringer Plate, double or treble Riveted for <u>half</u> length amidships. Breadth of laps of plating in double Riveting (<u>5 ins</u>) Breadth of laps of plating in single Riveting (<u>None</u>) | | | | | | | | |
| Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or <u>single</u> Riveted? | | | | | | | | |
| Planksheer, how secured to the plating of the sides. Waterway, how secured to the planksheer and to the Beams. (Explain by Sketch, if necessary.) <u>See Section</u> | | | | | | | | |
| Beams of the various Decks, how secured to the sides? <u>Bracket knees fixed on beams</u> No. of Breasthooks, <u>five</u> Crutches, <u>three</u> | | | | | | | | |
| What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? <u>Messend & Biddulph</u> | | | | | | | | |
| Manufacturer's name or trade mark, <u>Messend & Biddulph</u> | | | | | | | | |

We certify that the above is a correct description of the several particulars therein given.
Builder's Signature, Charles Cunliffe Surveyor's Signature, R McNeil

IRON 448 - 0142

Workmanship. Are the butts of plating planed or otherwise fitted? planed 8792 Iron
 Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? They do
 Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? And single pieces
 Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? They do and are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? They are
 Are there any rivets which either break into or have been put through the seams or butts of the plating? A few at butts

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. If they are of Iron or Steel give the Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit. The Mast 90 feet x 20 ins. 4 plates in section 1/8 thick. Main Mast 93 feet x 20 inches. 4 plates in section 1/8 thick. Butts treble edges double. Fore and Main lower yards 62 feet x 14 inches 2 plates in section 1/8 thick. Butts treble riveted, edges single riveted. Iron marked, Biddulph R.H.

| No. | Number for equipment | Fathoms. | Inches. | Test as per Certificate. | In. req'd per Rule. | Test req'd per Rule. | ANCHORS, &c. | No. | Weight Ex. Stock. | Test as per Certificate. | W't req'd per Rule. | Test req'd per Rule. |
|-----|---|----------|---------|--------------------------|---------------------|----------------------|--------------|------|-------------------|--------------------------|---------------------|----------------------|
| 9 | SAILS. | | | | | | Common | 4644 | 34.1.23 | 36.16.0.0 | 32. | 30.2/20 |
| | CABLES, &c. | | | | | | Bowers | 4643 | 34.1.6 | 36.12.3.1 | 32 | 30.2/20 |
| | Chain | 300 | 1 13/16 | 67.19.1.5 | 300 1 13/16 | 59.2/20 | | 4645 | 30.2.21 | 33.10.0.24 | 27.0.23 | 26.1/20 |
| | Fore Sails, (State Machine where Tested, and name of Superintendent). | | | | | | | | | | | |
| | Fore Top Sails, Hempen Stream Cable | 60 | 1 | 10 - | No 5149 | | Widman | 4645 | 13.2.21 | 13.2.2.0 | 13 | |
| | Fore Topmast Stay Sails | | | | | | Stream | | | | | |
| | Main Sails, Hawser | 90 | 1 1/2 | | 90 1 1/2 | | | 4642 | 6.3.10 | 8.2.3.7 | 6 1/2 | |
| | Main Top Sails, Towlines | 90 | 2 | | 12 | | | 4643 | 3.1.3 | 5.6.1.0 | 3 1/2 | |
| | Warp | 45 | 2 | | | | Kedges | | | | | |
| | All of <u>good</u> quality. | | | | | | | | | | | |

Her Standing and Running Rigging Widman sufficient in size and good in quality. She has Six Long Boats and

The present state of the Windlass is Good Capstan Good and Rudder Good Pumps Good

Engine Room Skylights. How constructed? In iron conings How secured in ordinary weather? Screws

What arrangements are there for deadlights in such for bad weather? Pulleys in top

Coal Bunker Openings. How constructed? In upper deck How are lids secured? by slits How high above deck? flush

Scuppers, &c. What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board? No bulwarks beyond stern and sails

Cargo Hatchways. How formed? In conings State size 16 x 10/6 and smaller

If of extraordinary size, state how framed and secured? The skylight beams in the main hatchway

What arrangement for shifting beams? one in main hatch at upper and middle ends

Hatches, themselves, whether strong and efficient? Yes Main Hatchways. State size 16 x 10/6

Order for Special Survey No. 699 DATES of 1st. On the several parts of the frame, when in place, and before the plating was wrought Butts under

Date June 6/71 Surveys held 2nd. On the plating during the progress of riveting Special Survey

Order for Ordinary Survey No. 74 while building 3rd. When the beams were in and fastened, and before the decks were laid between the

Date 21st March 71 as per 4th. When the ship was complete, and before the plating was finally coated or cemented 21st March 71

No. 74 in builder's yard. Section 18. 5th. After the ship was launched and equipped And 8th March 71

General Remarks Number of visits 56

This ship is built in accordance with the accompanying midship section as approved. The two bulkheads of the engine room are extended to the upper deck beams, and the after bulkhead, which extends to the middle deck has an iron top between middle and lower deck, enclosing the after compartment.

* The certificate of test for the above cable Nos 5147 and 5148, is enclosed. Twelve links selected by me, out of this cable, broke at 114.15.0.0 signed J. Frezenna. The anchors, also, have the S.P.T.C. test. The hawsers, certified to strains of 15% Cent above Admiralty test. signed J. Frezenna.

In what manner are the surfaces preserved from oxidation? Inside Pottland Cement Outside Paints

I am of opinion this Vessel should be Classed 100 A 3 Decks

The amount of the Entry Fee £ 5 : 0 : 0 is received by me,

Special £ 8/13 : 0 Certificate £ 10/0 : 0

(Travelling Expenses) (if any) £

Committee's Minute 14th March 1871

Character assigned 100 A 1

This vessel is built in accordance with the midship section appended which received the approval of the Committee. I concur in the recommendation that she be classed 100 A 1, three decks

W. J. Wainwright
 13/3/71